EARTHSAFE

Geological and Environmental Consulting

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Confirmation Sampling and Request for Case Closure at Carlson Garage
5131 Lincoln Avenue, Cypress, CA, 90630

Prepared for:

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February 11, 2006

Table of Contents

Introduction	 Page 1
Confirmation Soil Sampling	 Page 1
Well Head Survey	 Page 1
Groundwater Gradient	 Page 1
Analytical Testing	 Page 2
Discussion	 Page 3
Conclusions	 Page 4
Recommendations	 Page 5
Report Limitations	 Page 6
Figures Figure 1 - Confirmation Borings Figure 2 - Site Plan Groundwater Gradient	of Text of Text

Appendices

Appendix A - Boring Logs

Appendix B - Well Head Survey

Appendix C - Cumulative Soil and Groundwater Data

Appendix D - Well Gauging Log

Appendix E - Laboratory Reports and Chain of Custody Documents

Introduction

Active remediation has been terminated at Carlson Garage, 3311 Lincoln Avenue, Cypress, CA 90640. Confirmation borings have been sample and a round of groundwater monitoring was completed. The results of that activity are presented in this report.

Confirmation Soil Sampling

On May 23, 2005, three soil borings (C-2, C-3 and C-4) were advanced, using direct push technology, through the area known to be contaminated prior to the vapor extraction project, see Figure 1 for the location of the borings.

The soil boring adjacent to the former boring B-16 was moved slightly south east because the proposed location would have penetrated the former tank excavation backfill, which would not have been representative of the actual soil conditions.

Soil samples were collected at depths of 6, 8, 10, 12 and 14 feet below the ground surface. Each sample was collected in a brass tube, capped with teflon lined plastic lids, labeled, logged for lithology and on a chain of custody document, placed in a cooler with ice and transported to a State of California certified laboratory. The remaining portion of the sample was tested for head space vapors using an OVA meter, see Appendix A, Boring Logs.

A groundwater sample was collected from each boring as soon as sufficient water entered the boring. For boring C-2 the sample was collected when the boring was completed. For borings C-3 and C-4 the water was collected after the 8 foot deep soil sample was collected.

Sampling equipment was washed in a solution of TSP and rinsed twice using a three bucked system.

Each boring was backfilled immediately using bentonite granules.

Well Head Survey

On September 13, 2005 a well head survey was performed by WM Holdings Inc., a Licensed Land Surveyor (No. 5948). The well positions and elevations have been uploaded to Geotracker, see Appendix B for a copy of the survey.

As a result of the survey the true elevation of the wells is 1.8 feet higher than the temporary benchmark. Well MW-4 was cut to install the vapor extraction hardware, so it cannot be compared to it previous elevation.

Groundwater Gradient

The wells were gauged using a tape and paste method, see Appendix C for well data and Appendix D for the well gauging log. No free phase gasoline was measured in any well.

The collected data was used to calculate a groundwater gradient of 0.0177, directed due south and to draw the water table contours, see Figure 2. This is similar to the previous 7 years of observations, see Table 1.

His	Table 1 storic Gradient Measuremer	nts
Date	Magnitude	Azimuth
September 16, 2005	0.0177	180°
January 31, 2003	0.0163	182°
April 26, 2002	0.0120	186°
January 17, 2002	0.0121	187°
February 17, 2001	0.0098	190°
July 13, 2000	0.0120	189°
February 29, 2000	0.0127	189°
November 10, 1999	0.0131	188°
May 25, 1999	0.0164	183°
February 18, 1999	0.0162	182°
May 21, 1998	0.0256	172°

Analytical Testing

All samples analyzed for this report were delivered, under chain of custody protocol to Southland Technical Services of Montebello, CA, a State of California certified laboratory. Samples were analyzed for TPH as gasoline using LUFT Manual methodology and benzene, toluene, xylene, ethylbenzene and fuel oxygenates,

M.T.B.E., ETBE, DIPE, TAME and T-butyl alcohol, using EPA method 8260b. The complete laboratory report with chain of custody document is in Appendix E.

Discussion

The remediation project was designed to dewater the area of the gasoline plume and apply vapor extraction to the dewatered area. The goal was to remove and destroy gasoline from the soil thereby reducing the impact to public water supplies and the environment.

Through January 29, 2005, 448,590 gallons of water was treated and disposed of under the NPDES permit. Much of this water was removed from Wells MW-1 (the up gradient well) and MW-2 (the down gradient well). This pumping did not cause the plume to migrate toward either well; weekly testing of each influent source, as required by the NPDES permit, throughout the project indicated no increase in gasoline at either well, see Appendix C.

Site stratigraphy consists of thin beds of silt, sandy silt, silty sand and fine sand with intercalated contacts. These surficial soils were deposited in Holocene time by sheet floods crossing the Orange County Coastal Plain. Although these deposits are not old enough to have been significantly tilted or otherwise deformed by the tectonic activity associated with Southern California, the fine sand beds cannot be correlated between borings that are less than 12 feet apart. A sand bed was observed at a depth of 10 feet in boring C-2 but no similar bed was observed in boring C-3. At boring C-4 a sand bed was observed at a depth of 12 feet but no similar bed was observed in borings C-2 or C-3.

The dewatering produced water from the permeable sand beds while not completely draining the muddier lithologies within the cone of depression and the gasoline plume. As a result the vapor extraction unit had difficulty removing the volatile compounds adsorbed to the fine grained soils. Further use of this technology is unlikely to be productive.

The grab water samples improved between the hand auger sampling done in boring C-1 on June 9, 2004 and the three direct push borings done on May 23, 2005. TPH declined from 48,800 μ g/l in boring C-1 to 26,900 μ g/l, 5,230 μ g/l, and 16,100 μ g/l in borings C-2 through C-4 respectively. BTEX levels were reduced from 6,000± μ g/l for each constituent in borings C-2 through C-4 respectively.

It is noteworthy that each new boring within the plume produces water with high TPH and BTEX concentrations such as Wells MW-2 and MW-4. After removing several rounds of water during purging, the gasoline concentrations decline significantly. The

agitation of the soil caused by the drilling frees the adsorbed gasoline to dissolved in the water. Once the liberated gasoline is removed from the well, more gasoline is not released from the fine grained soil, even though more than 100,000 gallons of water are pumped from the well (MW-2 and MW-4).

It was only recently discovered by EarthSafe that a large volume (approximately 200 tons) of soil was removed from the site during the tank closure project. This helps to explain why the patch in the asphalt is so much larger than normal for a 10,000 gallon tank. This excavation resulted in settlement of the building's foundation and cracks to its walls.

Conclusions

Based upon the findings in this report we conclude the following:

- The adsorbed gasoline concentrations measured in the confirmation soil borings higher than desired, measuring as high as 7,220 mg/kg at a depth of 8 feet below the ground surface. The BTEX concentrations do not exceed 21.1 mg/kg for benzene and 121 mg/kg for total xylene at the location of Boring C-4 (the most distant from the extraction well, MW-4). The highest benzene concentration in the other two confirmation borings is 5.41 mg/kg at the location of boring C-2.
- Concentrations of adsorbed gasoline and its constituents have been reduced by the remediation project to the point that the permanent wells at the site show very little dissolved contaminants.
- Residual gasoline and BTEX is confined within a 400± square foot area in the down gradient area of the former gasoline tank, Figure 1.
- Based upon the vapor readings at the conclusion of the remediation project, it is unlikely that there will be a risk of benzene accumulating in any future structure which may be built at the site. Current building set back regulations make construction on this portion of the lot very unlikely.
- The source of the leaking gasoline was stopped with the removal of the tank.
- The export of the soil during the tank closure removed a large percentage of source material.
- Pump and treat along with vapor extraction has removed all of the fuel which can readily be extracted. The remaining fuel is entrapped in the fine grained soil.
 Excavation of this soil is not feasible due to the risk of damage to the subject

aerobically (not likely within the plume due to muddy soil conditions but highly likely to be the cause of the lack of migration) or anaerobically (very likely to be occurring with in the plume). Natural attenuation is likely to mitigate this plume within a reasonable time frame, several decades.

• Public water supplies, other beneficial uses of the affected aquifer, human health and the environment are not impacted by this plume.

Report Limitations

The results presented in this report represent conditions at the specific time and location at which samples were collected. It does not fully characterize the site for contamination.

The work described herein has been performed by EarthSafe and its licensed or certified subcontractors. The work has been performed in accordance with the local building codes, standards and practices currently accepted in the Environmental Consulting and Construction Industry. No other warranty is either expressed or implied.

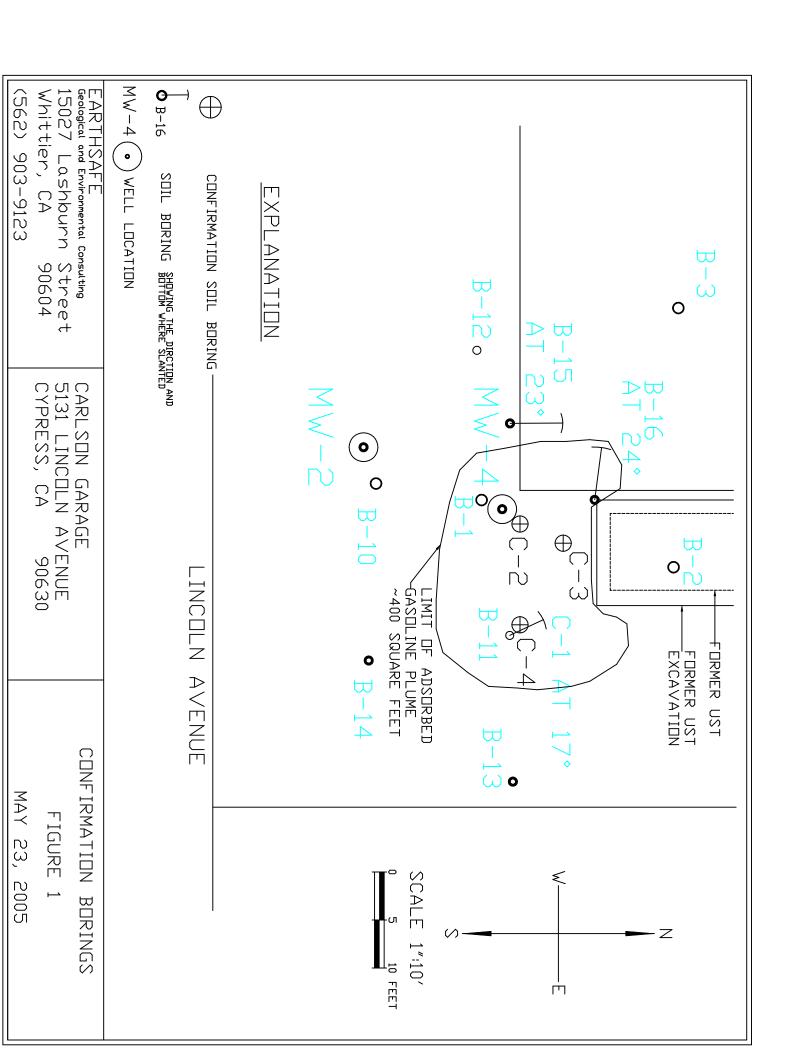
If you have any questions regarding this investigation, please do not hesitate to contact this office.

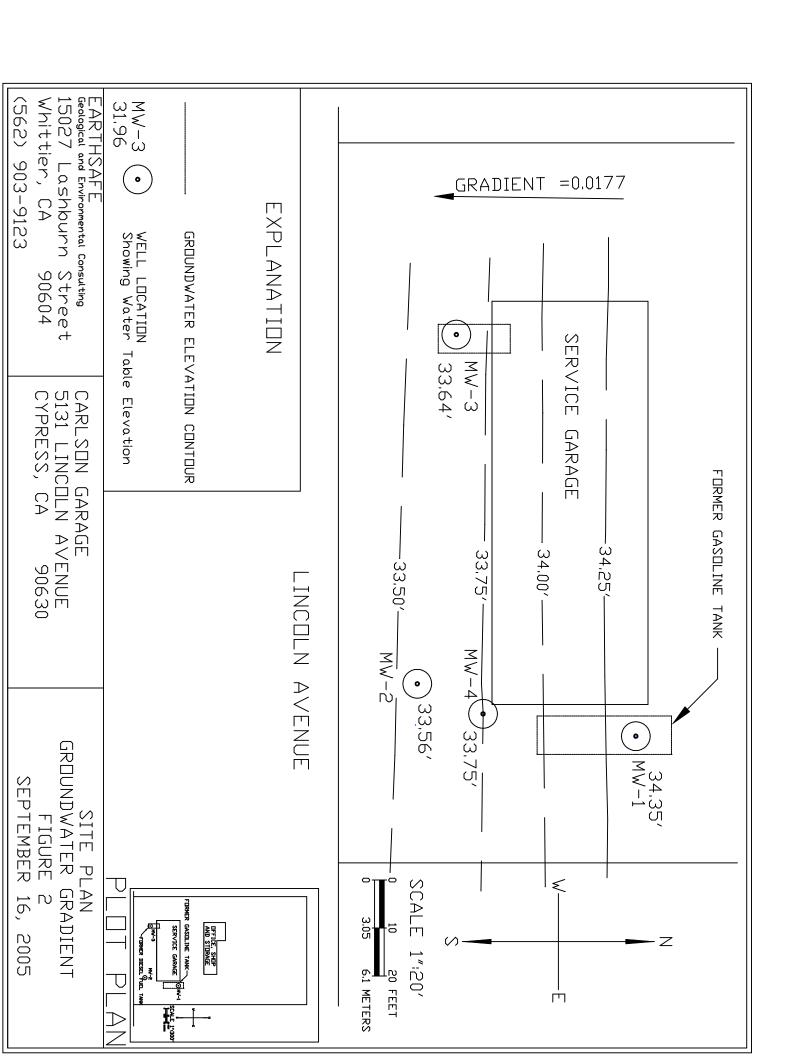
Christopher E. Wernicke

Registered Geologist No. 5590

Elmetyly E. Wermble







Appendix A

Boring Logs

Date: 5/23/05 Project: Carlson Garage Drilling Co. Vironex Hole Diameter: 2 inches

Drill Hole No. C-2

Sheet 1 of 1 Job No. Type of Rig: Hollow Stem Auger
Drive Weight: 140 lbs Drop: 30'
Ref. or Datum Drop: 30"

Depth Feet	Graphic Log	Sample Blows/ Foot	uscs	Odor/ OVA PPM	Description Logged By: Christopher E. Wernicke
-0		7			3" Asphaltic concrete
-		- -			
-	į	-			
- -5		- -	SP		
-		-	ML	Slight	@6' Brown silt, and grey sand; moist, dense
- - 		-	ML	Slight	@ 8' Brown silt, very moist, soft
10		- i - 	SP	None	@10' Grey sand, saturated
-	24,000 25,200 25,200 25,200	- -	SM	None	@12' Gray sand and silty sand; wet stiff
-	기부기부기 경우철(현)	- -	SM	None	@14' Gray, silty sand; saturated
15 -		- -			
_		-			
-		-			
20		- -			
-		-			
-		- -			
25		-			
-		-			
-		-			Notes: 1. Total depth: 14 feet 2. Water at 6.5 feet
30		-			3. Hydro punch to 8.5 4. Backfilled with Bentonite chips 5/23/05

Date: 5/23/05
Project: Carlson Garage
Drilling Co. Vironex
Hole Diameter: 2 inches
Elevation Top of Hole: 40.5'

Drill Hole No. C-3

Sheet 1 of 1 Job No.

Type of Rig: Hollow Stem Auger Drive Weight: 140 lbs Drop: 30" Ref. or Datum

- [Depth Feet	Graphic Log	Sample Blows/ Foot	uscs	Odor/ OVA PPM	Description Logged By: Christopher E. Wernicke
-	-0		٦			3" Asphaltic concrete
	-		-			
	_		-			
	-		-			
-	_		-			
	-5		-	SP		@6' Grey, fine sand; moist, dense
-	-		-			
	-		-	SM		@ 8' Grey silty sand; moist, dense
_	10		- -	ML		@10' Grey sandy silt; moist, dense
	-		-	ML		@12' Brown silt; saturated, soft
-	-		-			
	- 15	12.72.72	-	SM		@14' Gray, silty sand; saturated, dense
-	10		- -			
	_		-			
	-		-			,
	-		-			
	20		-			
	-		-			
	-		-			
	-		-			
	25		-			
	_		-			
	_		-		* :	
	-		-			
-	-		-			Notes: 1. Total depth: 14 feet
	30		-			2. Water at 6.5 feet
-			-			3. Backfilled with Bentonite chips 5/23/05
				,		

Drill Hole No. C-4

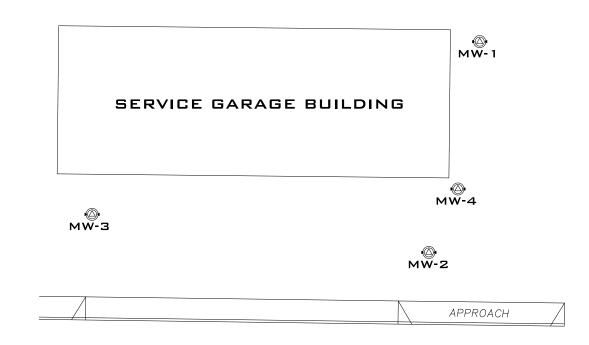
Date: 5/23/05
Project: Carlson Garage
Drilling Co. Vironex
Hole Diameter: 2 inches
Elevation Top of Hole: 40.5

Sheet 1 of 1 Job No. Type of Rig: Hollow Stem Auger Drive Weight: 140 lbs Drop: 30" Ref. or Datum

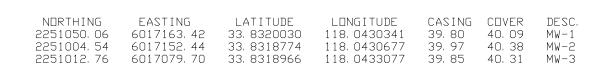
Depth Feet	Graphic Log	Sample Blows/ Foot	USCS	Odor/ OVA PPM	Description Logged By: Christopher E. Wernicke
-0		- -			3" Asphaltic concrete
-		-			'
_		-			
-		-			
-		-			
-5		-			
-		-	ML	None	@ 6' Brown silt; moist
-		-			
-		-	SM	Slight	@ 8' Grey silty sand; moist
-		-			
10		-	SM	None	@10' Grey sandy silt; saturated, dense
-		-			
-	+4+34	-	SM	None	@12' Light brown fine sand; saturated, dense
-		-			
- 4 -		-			
15		-			
-		-			
-		-			
_		<u>-</u>			
20		- _			
-		- 1			
		_			
_		-			
_		-			
25		-			
 -		-			
_		-			
_		-			
-	,	-			Notes: 1. Total depth: 14 feet
30		-			2. Water at 6.5 feet
		-			3. Backfilled with Bentonite chips 5/23/05
I		•			·

Appendix B

Well Head Survey



LINCOLN AVENUE



118. 0430478

39, 89

40. 54

SURVEY DATE: SEPTEMBER 13, 2005

2251018. 24

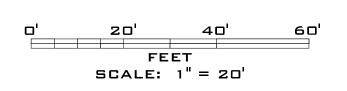
SURVEY CONTROL:
HORIZONTAL DATUM: NAD 83, ZONE 6, FEET
VERTICAL DATUM: NAVD 88, FEET
BENCHMARK: COUNTY OF ORANGE 1M-19-04
ELEVATION = 39, 453 FEET

6017158. 72 33. 8319153



WM HOLDINGS INC. W.L. Meagher 2747 Sherwin Ave. #12 Ventura, Ca. 93003 (805) 677-4850





MONITORING WELL SURVEY
CARLSON GARAGE
5131 LINCOLN AVENUE
CYPRESS, CALIFORNIA

MW-4

DRAWING NO.

B05145

REVISED: 09-19-2005

Appendix C **Cumulative Soil and Groundwater Data**

Table 1
Carlson Garage Cumulative Soil Data

	Boring	TPH-D mg/kg	mg/kg	Benzene mg/kg	Toluene mg/kg	benzene mg/kg	Xylene mg/kg	MTBE mg/kg	ETBE mg/kg	G III	E DIPE	
November 6, 1997	B-1@5'		1.470	10 N	28 ND	27 ND	75 ND		4 8	A ND		
	B-1@15'	•	S	S	S	8	8	- 1	S	ND	ND	ND
	R-2@13		20	0 16	0.56	0 45	<u>၂</u> န		200	0.04	0.04	0.04
,	B-2@18'	:	N	В	8	8	8		8	N	20	2
	B-3@4'		ND	8	S	N	B		R	ND	ND	ND
	B-3@9'		ND :	8	8	8	N		N	ND	ND	ND
5	B-3@13'		ND	B	B	ND	ND		ND	ND	ND	
	B-4@4'		ND	ND	ND	ND	ND		ND	ND	ND	ND
	B-4@9'		ND	N	N	S	S					
	B-4@14		ND	B	8	N	8	- 1	<u> </u>	<u> </u>	<u> </u>	<u> </u>
	B-5@4'		ND	8	B	NO	ND					
	B-5@9'		ND	8	8	8	ND					
1	B-5@14'		ND	N	8	8	N					
	B-6@4'	용	ND	8	8	S	R					
	В-6@9'	ND N	ND	NO.	N	ND	ND		:	:	:	:
	B-6@14'	ND	ND	S	N	8	2					
	B-7@4'	S	ND	8	8	2	8					
	B-7@9'	B	8	B	8	8	N N		-	-	-	-
	B-7@14		ND	S	S	2	8		20	20	20	NO
	B B-804	3 2	3 2	3 3	3 2	3 3	2 2					
-	B-8@14		N .	8	8	8	8		+	+	+	+
	B-9@4	İ	ND	공	공	8	8					
The control of the co	B-9@9		N	8	8	S	S					
	B-9@14'		S	8	8	8	R	:				
	B-10@5'		ND	8	8	8	B					
	B-10@9'	.	S	0.016	8	0.005	8					
-	B-10@14'		ND	S	8	0.024	8					
November 10, 1999	TW-1@5		S	N	S	0.026	S					
_	TW-2@8'		13,000	1	153	314	754	· 	·	·	·	·
	W-1a@3.5'		R	Š	R	0.011	S		<u>:</u> -	NO	NO	SO
January 17, 2001	MW-4@10'		968	10.2	23.8	22.1	57.3	<u> </u>			0.880	0.880 ND
	MW-4@15'		: 8	8	8	8	8	<u> </u>	8	÷	÷	÷
	B-11@4		1 730 ND	15 N	3 2	45 E	28 Z		5 8	2 2		2
	B-11@13	: ! !	ND !	<u>z</u>	5	S	<u>S</u>			S	ND I	ָבָּרָבָּרָ בּירָבָּיִרָּ

Table 1
Carlson Garage Cumulative Soil Data

		1					-									,		1	,									_		,	,	,		_
:			May 23, 2005					May 23, 2005					May 23, 2005			June 9, 2004												December 5, 2001				Date		
C-4 @ 12 C-4 @ 14	C-4 @ 10'	C-4 @ 8	C-4 @ 6	C-3 @ 14	C-3 @ 12	C-3 @ 10	C-3 @ 8'	C-3 @ 6'	C-2 @ 14'	C-2 @ 12'	C-2 @ 10'	C-2 @ 8'	C-2 @ 6'	C-1 @ 12.3	C-1@8.5	C-1@7		B-16@13.5	B-16@10.5	B-16@7'	B-15@14	B-15@9	B-14@13'	B-14@9	B-14@4	B-13@13	B-13@9'	B-13@4	B-12@13	B-12@8'	B-12@4	Boring		
=					_			!		:															:							mg/kg	TPH-D	
254 ND	3,860	7,220	415	90	ND	189	289	123	S	2,620	4,410	1	8	70	1,940	102		662	153	ND	ND	ND	ND	ND	N D	ND	N	ND	ND	ND	B	mg/kg	TPH-G	
3.39 ND	21.1	8	8	2.83	0.003	0.890	N	S	0.211	5.41	ND	N	8	1.30	2.80	B		1.01	0.430	N	ND	N	B	R	S	N	ND	ND	ND	ND	ND	mg/kg	Benzene	
5.95 ND	75.4	8	8	2.37	0.004	1.83	0.381	8	N	34.7	ND	0.053	N	20.1	12.2	ND N		4.36	1.28	8	8	S	N D	ND	Ŗ	S	8	N O	N O	R	S	mg/kg	Toluene	
2.65 ND	36.7	7.6	8	1.10	NO	2.09	0.665	S	0.008	40.8	73.5	0.239	8	12.1	25.5	B	!	6.44	1.41	ND.	8	N	S.	B	R	N	N	ND	ND	8	8	mg/kg	benzene	Ethyl-
7.84 ND	121	8	8 8	2.36	N	4.20	5.87	B	B.	100	31.0	0.187	N	36.2	38.1	0.065		15.9	3.21	N O	S	8	S	S	R	R	R	ND	ND	B	N	mg/kg	Xylene	
88	8	R	B	N D	B	. <u>Z</u>	8	R	중	8	8	R	R	2	S	R		8	8	S	8	8	8	8	8	8	8	8	8	8	S	mg/kg	MTBE	
88	S	8	B	ND	N O	S	8	8	8	8	B	ND	R	NO	8	8		8	8	8	S	8	8	8	8	S	N D	8		: !		mg/kg	ETBE	
중동	B	R	S	S	ND	ND	R	R	8	S	ND ND	ND	ND	20	2	S		8	8	N O	N O	N D	S	8	S	ND	N	S				mg/kg	DIPE	
88	8	S	8	Z	Z	Z O	S	8	8	Š	S	ND	8	20	S	8		8	S	S	S	N D	S	R	S	S	8	R				mg/kg	TAME	
88	S	8	N.	8	:O	S	R	S	8	8	8	NO	S	2	S	ND		B	S	B	R	R	N	8	R	S	B	N				mg/kg	ТВА	

	Well	Depth To Water	Well Casing Elevation	Water Ele.	TPH-D µg/l	TPH-G µg/l	Benzene µg/l	Toluene µg/l	Ethyl- benzene µg/l	Xylene µg/l	MTBE µg/i	ETBE	DIPE	TAME	ТВА
16-Sep-05	MW-1	5.45	39.80	34.35	·	ND	ND	ND	ND	ND	ND ND	ND	ND	ND ND	ND
26-Jan-05	MW-1					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
22-Dec-05	MW-1				ļ	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
6-Dec-05	MW-1			<u> </u>	ļ	ND	ND	ND ND	ND	ND	<u>ND</u>	ND	ND	ND	, ND -
26-Nov-04 8-Nov-04	MW-1					ND	ND	ND	ND ND	ND ND	ND ND	ND ND	ND ND	. ND ND	ND ND
27-Oct-04	MW-1	L				ND ND	ND ND	ND ND	ND ND	ND ND	ND	ND	ND	ND	ND
18-Oct-04	MW-1					ND	ND -	ND ND	ND	ND	ND · ·	ND	ND ND	ND	ND
9-Oct-04	MW-1				 	ND	ND	ND	ND	ND	ND ND	ND	ND	ND	ND
1-Oct-04	MW-1			j	†	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
23-Sep-04	MW-1					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
15-Sep-04	MW-1					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
9-Sep-04	MW-1				 	ND	ND	ND	ND	ND	ND :	ND	ND ND	ND	: ND
30-Aug-04	MW-1			<u> </u>	<u> </u>	ND	ND	ND	ND	ND	ND	ND_	: ND	ND	ND
23-Aug-04 31-Jul-04	MW-1	<u></u>	<u> </u>		,	ND ND	ND 1,1	ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
23-Jul-04	MW-1			 		ND	ND	ND ND	ND	ND	ND :	ND ND	ND	ND	<u>ND</u>
15-Jul-04	MW-1			<u>-</u>		ND	ND	ND	ND	ND	ND.	ND ND	ND	ND	ND
8-Jul-04	MW-1		-	· · · · · · · · · · · · · · · · · · ·		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
29-Jun-04	MW-1			<u> </u>	,	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
24-Jun-04	MW-1			1		ND	1.1	ND	ND	ND	ND	ND	ND	ND	ND
16-Jun-04	MW-1				ļ	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
9-Jun-04	MW-1			l	ļ <u> </u>	ND	ND.	ND	ND	ND	ND	ND	ND.	ND	ND.
2-Jun-04	MW-1 MW-1	i		<u> </u>	i	ND	ND	ND	ND	ND	ND ND	ND	ND ND	ND ND	ND.
24-May-04 18-May-04	MW-1	·		· 	!	ND ND	ND.	ND ND	ND ND	ND ND	ND	ND ND	ND ND	ND	DN DN
10-May-04	MW-1					ND	ND	ND	ND	ND	ND .	ND	ND	ND	ND
3-May-04	MW-1				7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
27-Apr-04	MW-1				i	ND	ND	ND	ND	ND	ND :	ND	ND	ND	ND
19-Apr-04	MW-1			<u> </u>		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
9-Apr-04	MW-1			·		ND	ND	ND	ND	ND	ND	ND	<u>ND</u>	ND	, ND
30-Mar-04	MW-1		*	<u></u>	<u> </u>	ND	ND	ND	ND	ND	ND.	ND	ND	ND	ND
12-Mar-04 14-May-03	MW-1 MW-1	5.22	38.00	32.78		ND ND	ND ND	ND ND	ND ND	ND ND	ND '	ND ND	ND ND	ND	ND ND
31-Jan-03	MW-1	5.84	38.00	32.16		ND	ND	ND	ND	ND	ND	ND ND	ND	ND	ND
20-Sep-02	MW-1		00.00			ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
26-Apr-02	MW-1	5.84	38.00	32.16				-							
17-Jan-02	MW-1	5.80	38.00	32.20		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
21-Feb-01	MW-1	5.02	38.00	32.98		ND	ND	ND ND	ND	ND	ND	ND	ND	ND	ND
13-Jul-00	MW-1	5.73	38.00	32.27	<u> </u>	ND	ND	ND	ND	ND	ND				
29-Feb-00 10-Nov-99	MW-1 MW-1	5.49 5.86	38.00 38.00	32.51 32.14		ND	ND ND	ND ND	ND ND	ND ND	1.5				
25-May-99	MW-1	5.42	38.00	32.58		ND ND	ND	ND	ND	ND	ND		7-		
18-Feb-99	MW-1	5.35	38.00	32.65		ND	ND .	ND	ND	ND	ND			•	
21-May-98	MW-1	4.27	38.00	33.73	ND	ND	ND	ND	ND	ND	ND				
	İ														
16-Sep-05	MW-2	6.41	39.97	33.56	ļ	ND	2.2	ND	4.1	ND	ND	ND	ND	, ND	ND
26-Jan-05 22-Dec-05	MW-2				1	ND	ND	ND	ND	ND	ND	ND ND	ND ND	ND	ND ND
6-Dec-05	MW-2 MW-2		<u> </u>		·	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
26-Nov-04	MW-2	<u>. </u>		<u>!</u>	i	ND	ND	ND -	ND	ND	ND	ND	ND	ND	ND
8-Nov-04	MW-2			<u> </u> 		ND	1.2	ND	ND	ND	ND	ND	ND	ND	ND
27-Oct-04	MW-2			· · · · · · · · · · · · · · · · · · ·		ND	· ND	ND	ND	ND	ND	ND	ND	ND	ND
18-Oct-04	MW-2					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
9-Oct-04	MW-2				<u>.</u>	ND	ND	ND	ND	ND	ND	ND	ND_	ND	ND
1-Oct-04	MW-2		L			ND	ND	ND	ND	ND	ND	ND ND	ND	ND	ND
23-Sep-04 15-Sep-04	MW-2 MW-2					ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
9-Sep-04	MW-2		<u></u>	<u>!</u>	1	ND	ND	ND	ND	ND	ND	ND ND	ND ND	ND ND	ND
30-Aug-04	MW-2			i		ND	ND	ND:	ND	ND ND	ND	ND	ND	: ND	ND
23-Aug-04	MW-2			i	1	ND	ND	ND	ND	ND	ND	ND	ND ND	ND	ND
9-Aug-04	MW-2				<u> </u>	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
31-Jul-04	MW-2					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
23-Jul-04	MW-2		<u> </u>			ND	ND	ND	ND .	ND	ND	ND	ND ND	ND	ND
15-Jul-04	MW-2			<u> </u>	 	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
8-Jul-04 29-Jun-04	MW-2 MW-2			!		ND ND	ND 4.6	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
29-Jun-04 24-Jun-04	MW-2		<u></u>			ND.	ND	ND	ND	ND .	ND ND	ND ND	ND ND	ND.	ND
16-Jun-04	MW-2				 	ND	1.8	ND	ND	ND .	ND	ND	ND ND	ND ND	ND
9-Jun-04	MW-2	h		:		ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND
2-Jun-04	MW-2					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
24-May-04	MW-2				1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
18-May-04	MW-2				ļ	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
10-May-04	MW-2		<u> </u>	<u> </u>		ND	1.4	ND	ND	ND_	ND	ND_	ON	ND	ND

- [Well	Depth To Water	Well Casing Elevation	Water Ele.	TPH-D μg/l	TPH-G µg/l	Benzene µg/l	Toluene µg/l	Ethyl- benzene µg/l	Xylene μg/l	MTBE µg/l	ETBE	DIPE	TAME	ТВА
	3-May-04 27-Apr-04	MW-2 MW-2					ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
-	19-Apr-04	MW-2				÷					:				:	
	9-Apr-04 30-Mar-04	MW-2 MW-2			, -		ND 70	ND 16	ND 0.5	ND ND	ND 3.4	ND 1.1	ND	ND	ND	ND
	12-Mar-04	MW-2				·	ND	7.27	ND	ND	ND	ND	ND	ND	ND	ND
_ (14-May-03	MW-2	6.41	38.18	31.77	<u></u>	ND	3.1	ND	ND	ND	ND	ND	ND ND	ND	ND
1	31-Jan-03 20-Sep-02	MW-2 MW-2	6.66	38.18	31,52		ND ND	21.2 ND	ND ND	2.6 ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
	26-Apr-02	MW-2	6.53	38,18	31.65	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
_	17-Jan-02 17-Feb-01	MW-2 MW-2	6.55 5.67	38.18 38.18	31.63 32.51	! -	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
	13-Jul-00	MW-2	6.48	38.18	31.70	-	ND	1.7	ND	2.2	ND 1	1.1	III.	110		
1	29-Feb-00 10-Nov-99	MW-2 MW-2	6,28 6,67	38.18 38.18	31.90 31.51	! <u></u>	1,470	1.2 67.7	ND 9.9	1.5 96.6	ND 48	ND 15.4				
	25-May-99	MW-2	6.37	38.18	31,81	: : - <u>-</u> -	913	43	3.9	79.3	60	ND		L		
_	18-Feb-99	MW-2	6.31	38.18	31.87	700	666	43.5	5.3	70	47.8	5.2				
	21-May-98	MW-2	5.60	38.18	32.58	780	3,040	99	18	315	290	ND			,	
	16-Sep-05	MW-3	6.21	39.85	33,64	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
-	14-May-03 31-Jan-03	MW-3 MW-3	6.20 6.58	38,05 38,05	31.85 31.47	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND ND
	20-Sep-02	MW-3	0.00				ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	26-Apr-02 17-Jan-02	MW-3	6,45 6,45	38.05 38.05	31.60 31.60	 ND	ND	ND	ND	 ND	ND	ND	ND	ND	ND.	44.4
-	17-5an-02	MW-3	5.59	38.05	32.46	ND	ND	ND	ND	ND	ND	6.3	ND	ND	ND	ND ND
	13-Jul-00	MW-3	6.48	38.05	31.57		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	29-Feb-00 10-Nov-99	MW-3	6.19 6.57	38.05 38.05	31.86 31.48	ND	ND	ND	ND	ND	ND	ND				
	25-May-99	MW-3	6.14	38.05	31.91	ND	ND	ND	ND	ND	ND	ND		<u> </u>	-+	
	18-Feb-99 21-May-98	MW-3 MW-3	6.09 5.01	38.05 38.05	31,96 33,04	ND	ND ND	ND ND	ND ND	ND ND	ND ND	ND 2.1	• · · · · · · · · · · · · · · · · · · ·	÷		
							L	L								
_	16-Sep-05 26-Jan-05	MW-4 MW-4	6.14	39.89	33,75		ND ND	ND 24.2	ND ND	ND ND	, ND ND	ND ND	ND ND	ND ND	ND DN	ND ND
	22-Dec-05	MW-4	4:00 PM				180	1,4	ND	ND	ND	ND	ND	ND	ND	ND
	22-Dec-05 6-Dec-05	MW-4	12:30 PM		: :	<u> </u>	87.9 ND	12.5 1.5	4,3 ND	ND ND	6.9	ND ND	ND ND	ND ND	ND ND	ND ND
_	26-Nov-04	MW-4					377	12,5	1.4	1.3	26.4	ND	ND	ND	ND	ND
	8-Nov-04 27-Oct-04	MW-4 MW-4				<u> </u>	ND ND	ND 4	ND 1.1	ND ND	3.5 ND	ND ND	ND ND	ND ND	ND ND	ND ND
	18-Oct-04	MW-4	i		<u>————</u>	i	62.4	4.3	1.5	ND	3.6	ND	ND	ND	ND	ND
	9-Oct-04	MW-4	B.00 A&A			Ī-,	ND	1	ND	, ND	ND	ND ND	ND ND	ND ND	ND ND	ND
	1-Oct-04 1-Oct-04	MW-4	8:32 AM 6:59 AM		.	 	ND ND	10.3 5.9	1.4 ND	ND ND	ND ND	ND ND	ND ND	ND	ND	, ND ND
	23-Sep-04	MW-4					72	8.3	2.3	1.4	10.1	ND	ND	ND	ND	ND
_	15-Sep-04 9-Sep-04	MW-4	<u>. </u>				78.4 ND	23.8 ND	1.8 ND	2.9 ND	3.6 ND	ND ND	ND ND	ND ND	ND ND	ND ND
	30-Aug-04	MW-4					65	8.3	2.4	2.2	9.6	ND	ND	ND	ND	ND
	23-Aug-04 9-Aug-04	MW-4	<u> </u>			<u>:</u>	ND ND	5,8 ND	ND ND	1.7 ND	1.3 ND	ND ND	ND ND	ND ND	ND ND	DND
_	31-Jul-04	MW-4					60.9	8.9	1	ND	4.2	ND	ND	ND	ND	ND
	23-Jul-04 15-Jul-04	MW-4 MW-4			:		ND ND	5.4 ND	ND ND	1.1 ND	ND	ND ND	ND ND	ND ND	ND ND	, ND ND
	8-Jul-04	MW-4	1:20 PM		:		77.8	8	2.5	8.2	5.9	ND_	ND	ND	ND	ND
_	8-Jul-04 29-Jun-04	MW-4	11:44 AM		<u> </u>		ND ND	2.5	ND ND	ND ND	2.2 ND	ND ND	ND ND	ND ND	: N D - N D	ND ND
	24-Jun-04	MW-4					193	90.3	15	ND	65.8	3.2	ND	ND	ND	ND
	16-Jun-04	MW-4					451	9.8	5.6	21.8	11.6	ND ND	ND	ND	ND	ND
	9-Jun-04 2-Jun-04	MW-4 MW-4	-		<u> </u>		ND 217	18 78.5	4.1 16.2	ND 8.2	17.6	ND ND	ND ND	ND ND	ND ND	ND ND
-	24-May-04	MW-4					ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	18-May-04 10-May-04	MW-4 MW-4		·		-	ND 350	ND 11.8	ND ND	ND ND	ND 313	ND ND	ND ND	ND ND	ND ND	ND ND
	3-May-04	MW-4			!		ND	1.3	ND	ND	7.6	ND	ND	ND	ND	ND
_	27-Apr-04 19-Apr-04	MW-4			-	-	48 665	ND 11.4	ND 4.4	ND 1.4	3.6 200	ND ND	ND ND	ND ND	ND ND	ND ND
	9-Apr-04	MW-4					49	2.8	ND	ND	4.3	ND	ND	ND	ND	ND
	19-Mar-04 12-Mar-04	MW-4					48 165	4.8 2.23	1,3	0.9	0.47	ND ND	- ND	ND	ND	ND
-	12-Mar-04 14-May-03	MW-4	6.00	38.14	32.14		770	2.23 ND	ND ND	2.5 2.5	4.32 12.9	ND	ND ND	ND ND	ND	ND ON
	31-Jan-03	MW-4	6.63	38.14	31,51		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND ND
	20-Sep-02 26-Apr-02	MW-4	6.42	38,14	31.72		ND ND	ND ND	ND ND	ND ND	ND ND	. <u>ND</u> . ND	ND ND	ND ND	ND ND	ND ND
-					ER THE NEX	(T DAY	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Carlson Garage Cumulative Well Data

			Well		1				Ethyl-		_			ļ	
		Depth To	Casing		TPH-D	TPH-G	Benzene	Toluene	benzene	Xylene	MTBE		!	:	
	Well	Water	Elevation	Water Ele.	μg/l	μg/I	μg/l	μg/l	μg/l	μg/l	μg/l	ETBE	DIPE	TAME	TBA
20-Jan-02	MW-4	WELL SUF	RFACE WAT	TER AFTER	RECHAP	ND	2.7	ND	ND	2.1	ND	ND	ND	ND	11
20-Jan-02	MW-4	WELL SUR	RFACE WAT	TER AT END	OF TES	95	23.5	2.3	5.5	12.3	ND	ND	ND	ND	ND
20-Jan-02	MW-4	PUMP TES	T DISCHAP	RGE WATER	RFROM	ND	2.1	ND	ND	ND	ND	ND	ND	ND	ND
17-Jan-02	MW-4	6.34	38.14	31.80		ND	ND	ND	ND	ND	ND	ND	ND	ND	21.5
17-Feb-01	MW-4	5.55	38.14	32.59		1,020	31	27	18.4	210	ND	ND	ND	ND	ND
10-Nov-99	TEMP	Į.		1		20,700	596	681	1,780	2,670	32.2				
10-Nov-99	TEMP				<u> </u>	16,600	559	422	1,600	1,980	13.3				
· ·······		<u> </u>							· · ·	:				•	
9-Jun-04	C-1	İ			1	48,800	5,050	6,750	1,680	5,870	ND	ND	ND	ND	ND
23-May-05	C-2	[Ţ- · · ·	26,900	13.5	6.0	39.2	20.0	ND	ND	ND	ND	ND
23-May-05	C-3			i	!	5,230	43.5	39.5	35.2	263	ND	ND	ND	ND	ND
23-May-05	C-4					16,100	79.5	220	515	685	ND :	ND	ND	ND	ND

Appendix D

Well Gauging Log



15027 Lashburn Street, Whittier, CA 90604 (562) 903-9123 CSL #734057 A-Haz, C-57

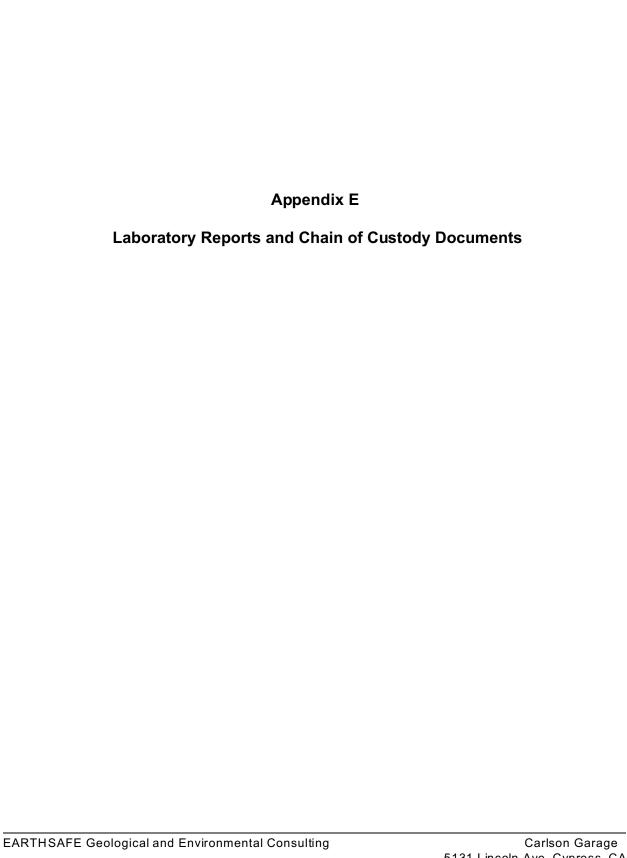
Well Gauging Log

Project Name & Address:

Date 9-16-05

Field Crew C. Wernicke

Time	Well ID	Depth to Static Water	ORP	Dissolved	Free Product	Notes
[] ['	level		O ₂	Thickness	
2:50	MWY	6'-65/8" 6,5'-1/8" 6,5'-3,5"				-
2:53	MW-2	6,5'-1/8"				
2:57	MW-3	6.5'-3.51				
3:02	MW-4	7'-103/8"		- <u> </u>		
		_				
3:10	MULLY	Sample Sample Sample Sample				
3:15	MW-3	Sample		<u>.</u>		
3,25	MW-2	Sample				
3:36	10W-1	Samp/-				<u> </u>
 			· 	<u> </u>		
				!		
<u></u>						
	<u> </u>					
						
		[<u> </u>		





Environmental Laboratories

06-03-2005

Mr. Chris Wernicke, R.G. Earth Safe 15027 Lashburn Street Whittier, CA 90604

Project:

Carlson Garage

Project Site:

5131 Lincoln Ave., Cypress, CA

Sample Date:

05-23-2005

Lab Job No.:

AH505157

Dear Mr. Wernicke:

Enclosed please find the analytical report for the sample(s) received by STS Environmental Laboratories on 05-23-2005 and analyzed by the following methods:

EPA 8015M (Gasoline) EPA 8260B (BTEX & Oxygenates by GC/MS)

All analyses have met the QA/QC criteria of this laboratory.

The sample(s) arrived in good conditions (i.e., chilled, intact) and with a chain of custody record attached.

STS Environmental Laboratory is certified by CA DHS (Certificate Number 1986). Thank you for giving us the opportunity to serve you. Please feel free to call me at (323) 888-0728 if our laboratory can be of further service to you.

Sincerely

Roger Wang, Ph.D. Laboratory Director

Enclosures

This cover letter is an integral part of this analytical report.



Environmental Laboratories

06-03-2005

Client:

Earth Safe

Lab Job No.:

AH505157

Project: Project Site: Carlson Garage

Matrix:

5131 Lincoln Ave., Cypress, CA

Date Sampled:

05-23-2005

Soil

Date Received:

05-23-2005

Batch No.:

CME23-GS1

Date Analyzed:

05-23-2005

EPA Method 8015M (Gasoline)

Reporting Units: mg/kg (ppm)

Sample ID	Lab ID	C4-C12	Reporting Limits
		(Gasoline)	
Metho	d Detection Limit	ND	0.5
Method Blank		ND	0.5
C-2@6'	AH505157-1	ND	0.5
C-2@8'	AH505157-2	11.0	0.5
C-2@10'	AH505157-3	4,410	0.5
C-2@12'	AH505157-4	2.620	0.5
C-2@14'	AH505157-5	ND	0.5
C-3@6'	AH505157-6	123	0.5
C-3@8'	AH505157-7	289	0.5
C-3@10'	AH505157-8	189	0.5
C-3@12'	AH505157-9	ND	0.5
C-3@14'	AH505157-10	90.2	0.5
C-4@6'	AH505157-11	415	0.5
C-4@8'	AH505157-12	7,220	0.5
C-4@10'	AH505157-13	3,860	0.5
C-4@12'	AH505157-14	254	0.5
C-4@14'	AH505157-15	ND	0.5

ND: Not Detected (at the specified limit).



Environmental Laboratories

06-03-2005

Client:

Earth Safe

Lab Job No.:

AH505157

Project:

Carlson Garage

Project Site: 5131

5131 Lincoln Ave., Cypress, CA

Date Sampled:

05-23-2005

Matrix:

Water

Date Received:

05-23-2005

Batch No.:

AME26-GW1

Date Analyzed:

05-26-2005

EPA Method 8015M (Gasoline) Reporting Units: μg/L (ppb)

Sample ID	Lab ID	C4-C12 (Gasoline)	Reporting Limits
Metho	d Detection Limit	ND	50
Method Blank		ND	50
C-2 Water	AH505157-16	26,900	50
C-3 Water	AH505157-17	5,230	50
C-4 Water	AH505157-18	16,100	50

ND: Not Detected (at the specified limit).



Environmental Laboratories

06-03-2005

Client:

Earth Safe

Lab Job No.:

AH505157

Project:

Carlson Garage

Project Site:

5131 Lincoln Ave., Cypress, CA

Date Sampled:

05-23-2005

Matrix:

Soil

Date Received:

05-23-2005

Batch No.:

0523-VOCS

Date Analyzed:

05-23-2005

EPA 8260B (BTEX & Oxygenates by GC/MS)

Reporting Units: mg/kg (ppm)

Lab ID	Method Blank	AH505157-	AH505157- 2	AH505157- 3	AH505157- 4	AH505157- 5	AH505157- 6	MDL
Sample ID	Dialik	C-2@6'	C-2@8'	C-2@10'	C-2@12'	C-2@14'	C-3@6'	
DF	1	1	25	500	250	2.5	50	1
Benzene	ND	ND	ND	ND	5.41	0.211	ND	0.002
Toluene	ND	ND	0.053	ND	34.7	ND	ND	0.002
Ethylbenzene	ND	ND	0.239	73.5	40.8	0.008	ND	0.002
Total Xylenes	ND	ND	0.187	31.0	100	ND	ND	0.004
MTBE	ND	ND	ND	ND	ND	ND	ND	0.005
ЕТВЕ	ND	ND	ND	ND	ND	ND	ND	0.005
DIPE	ND	ND	ND	ND	ND	ND	ND	0.005
TAME	ND	ND	ND	ND	ND	ND	ND	0.005
TBA	ND	ND	ND	ND	ND	ND	ND	0.020

Lab ID	Method Blank	AH505157- 7	AH505157- 8	AH505157- 9	AH505157- 10	AH505157- 11	AH505157- 12	MDL
Sample ID	Diank	C-3@8'	C-3@10'	C-3@12'	C-3@14'	C-4@6'	C-4@8'	
DF	1	50	250	1	50	100	1000	
Benzene	ND	ND	0.890	0.003	2.38	ND	ND	0.002
Toluene	ND	0.381	1.83	0.004	2.37	ND	ND	0.002
Ethylbenzene	ND	0.665	2.09	ND	1.10	ND	7.6	0.002
Total Xylenes	ND	5.87	4.20	ND	2.36	ND	ND	0.004
MTBE	ΝD	ND	ND	ND	ND	ND	ND	0.005
ЕТВЕ	ND	ND	ND	ND	ND	ND	ND	0.005
DIPE	ND	ND	ND	ND	ND	ND	ND	0.005
TAME	ND	ND	ND	ND	ND	ND	ND	0.005
ТВА	ND	ND	ND	ND	ND	ND	ND	0.020

MDL=Method Detection Limit, DF=Dilution Factor (**DF** × **MDL** = **Reporting Limit** for the sample),



Environmental Laboratories

dilution analysis.



Environmental Laboratories

06-03-2005

Client:

Earth Safe

Lab Job No.:

AH505157

Project: Project Site: Carlson Garage

5131 Lincoln Ave., Cypress, CA

Date Sampled:

05-23-2005

Matrix:

Date Received:

05-23-2005

Soil

0523-VOCS Batch No.:

Date Analyzed:

05-23-2005

EPA 8260B (BTEX & Oxygenates by GC/MS) Reporting Units: mg/kg (ppm)

Lab ID	Method Blank	AH505157- 13	AH505157- 14	AH505157- 15		MDL
Sample ID	Diank	C-4 @10'	C-4 @12'	C-4 @14'		
DF	ı	1.000	250	1		
Benzene	ND	21.1	3.39	ND		0.002
Toluene	ND	75.4	5.95	ND		0.002
Ethylbenzene	ND	36.7	2.65	ND		0.002
Total Xylenes	ND	121	7.84	ND		0.004
MTBE	ND	ND	ND	ND		0.005
ETBE	ND	ND	ND	ND		0.005
DIPE	ND	ND	ND	ND		0.005
TAME	ND	ND	ND	ND		0.005
ТВА	ND	ND	ND	ND		0.020

MDL=Method Detection Limit. DF=Dilution Factor (**DF** × **MDL** = **Reporting** Limit for the sample). ND=Not Detected (at the specified limit), * Obtained from a higher dilution analysis.



Environmental Laboratories

06-03-2005

Client:

Earth Safe

Lab Job No.:

AH505157

Project:
Project Site:

Carlson Garage

5131 Lincoln Ave., Cypress, CA

Date Sampled:

05-23-2005

Matrix:

Water

Date Received:

05-23-2005

Batch No.:

0526-VOAW

Date Analyzed:

05-26-2005

EPA 8260B (BTEX & Oxygenates by GC/MS) Reporting Units: μg/L (ppb)

Lab ID	Method Blank	AH505157- 16	AH505157- 17	AH505157- 18		MDL
Sample ID	Diank	C-2 Water	C-3 Water	C-4 Water		
DF	1	5	5	2.5		
Benzene	ND	13.5	43.5	79.5		1
Toluene	ND	6.0	39.5	220		1
Ethylbenzene	ND	39.2	35.2	515		1
Total Xylenes	ND	20.0	263	685		2
МТВЕ	ND	ND	ND	ND		2
ЕТВЕ	ND	ND	ND	ND		2
DIPE	ND	ND	ND	ND		2
TAME	ND	ND	ND	ND		2
TBA	ND	ND	ND	ND		10

MDL=Method Detection Limit, DF=Dilution Factor ($DF \times MDL = Reporting Limit$ for the sample), ND=Not Detected (at the specified limit).



Environmental Laboratories

06-03-2005

EPA 8260B Batch QA/QC Report

Client: Project: Earth Safe

Carlson Garage

Matrix:

Water

Batch No:

0526-VOAW

Lab Job No.:

AH505157

Lab Sample ID:

R505176-1

Date Analyzed:

05-26-2005

I. MS/MSD Report Unit: ppb

Compound	Sample Conc.	Spike Conc.	MS	MSD	MS %Rec.	MSD %Rec.	% RPD	%RPD Accept. Limit	%Rec Accept. Limit
1.1- Dichloroethene	ND	20.0	14.3	18.0	71.5	90.0	22.9	30	70-130
Benzene	ND	20.0	17.3	21.5	86.5	107.5	21.6	30	70-130
Trichloro- ethene	ND	20.0	15.2	24.0	76.0	120.0	44.9	30	70-130
Toluene	ND	20.0	22.7	23.8	113.5	119.0	4.7	30	70-130
Chlorobenzene	ND	20.0	18.0	21.1	90.0	105.5	15.9	30	70-130

II. LCS Result Unit: ppb

Compound	LCS Report Value	True Value	Rec.%	Accept. Limit
1,1-Dichloroethene	48.9	50.0	97.8	80-120
Benzene	52.7	50.0	105.4	80-120
Trichloro-ethene	46.9	50.0	93.8	80-120
Toluene	46.8	50.0	93.6	80-120
Chlorobenzene	51.2	50.0	102.4	80-120

ND: Not Detected (at the specified limit)



Environmental Laboratories

06-03-2005

EPA 8015M (TPH) Batch QA/QC Report

Client:

Earth Safe

Project:

Carlson Garage

Matrix:

Water

Batch No:

AME26-GW1

Lab Job No.:

AH505157

Sampled ID:

R505176-1

Date Analyzed:

05-26-2005

I. MS/MSD Report Unit: ppb

Analyte	Sample Conc.	Spike Conc.	MS	MSD	MS %Rec.	MSD %Rec.	% RPD	%RPD Accept. Limit	%Rec Accept. Limit
TPH-g	ND	1,000	1,060	949	106.0	94.9	11.1	30	70-130

II. LCS Result Unit: ppb

Analyte	LCS Report Value	True Value	Rec.%	%Rec Accept. Limit
TPH-g	875	000,1	87.5	80-120

ND: Not Detected (at the specified limit).



Environmental Laboratories

06-03-2005

EPA 8015M (TPH) Batch QA/QC Report

Client:

Earth Safe

Project:

Carlson Garage

CME23-GS1

Matrix:

Soil

Batch No:

Lab Job No.:

AH505157

Sampled ID:

SS0523-1

Date Analyzed:

05-23-2005

Phone: (323) 888-0728 Fax: (323) 888-1509

I. MS/MSD Report Unit: ppb

Analyte	Sample Conc.	Spike Conc.	MS	MSD	MS %Rec.	MSD %Rec.	% RPD	%RPD Accept. Limit	%Rec Accept. Limit
TPH-g	ND	5,000	993	954	19.9	19.1	4.1	30 -	70-130

II. LCS Result Unit: ppb

8

Analyte	LCS Report Value	True Value	Rec.%	%Rec Accept. Limit
TPH-g	1.010	1.000	101.0	80-120



Environmental Laboratories

06-03-2005

EPA 8260B Batch QA/QC Report

Client:

Earth Safe

Project:

Carlson Garage

Matrix:

Soil

Batch No:

0523-VOCS

Lab Job No.:

AH505157

Lab Sample ID:

SS0523-1

Date Analyzed:

05-23-2005

I. MS/MSD Report Unit: ppb

Compound	Sample Conc.	Spike Conc.	MS	MSD	MS %Rec.	MSD %Rec.	% RPD	%RPD Accept. Limit	%Rec Accept. Limit
1,1- Dichloroethene	ND	20.0	22.7	16.4	113.5	82.0	32.2	30	70-130
Benzene	ND	20.0	24.1	18.3	120.5	91,5	27.4	30	70-130
Trichloro- ethene	ND	20.0	25.3	20.3	126.5	101.5	21.9	30	70-130
Toluene	ND	20.0	24.4	21.0	122.0	105.0	15.0	30	70-130
Chlorobenzene	ND	20.0	20.3	14.2	101.5	71.0	35.4	30	70-130

II. LCS Result Unit: ppb

Compound	LCS Report Value	True Value	Rec.%	Accept. Limit
1,1-Dichloroethene	18.5	20.0	92.5	80-120
Benzene	20.9	20.0	104.5	80-120
Trichloro-ethene	22.9	20.0	114.5	80-120
Toluene	20.0	20.0	100.0	80-120
Chlorobenzene	23.5	20.0	117.5	80-120

ND: Not Detected (at the specified limit)



806 N. Batavia • Orange, CA 92868 (714) 771-6900 • Fax: (714) 538-1209

CHAIN OF CUSTODY RECORD

Date 5-23-07 Page Z of Z

		1							•
CLIENT FAY	Earmour					j			**************************************
ŠŠ		PROJECT MANAGER	IANAGE	\sim	11/6/	Allo Mello	1/2	Sample	s Intact Yes V No
		PHONE NUMBER	ABEB,	266	3-91	71		County	County Seals Intact Yes (1716) Sample Ambient Cooled Frozen
PROJECT NAME	PROJECT NAME CANTERN GOVILLY	SAMPLERS: (Signature)	(Signature	Ire)	S			Same Day Regular	24 Hr
SAMPLE NUMBER	LOCATION DESCRIPTION	DATE	TIME	S/ WATER	SAMPLE TYPE	SOLID	NO OF	SUSP.	TESTS REQUIRED
M505157-8	C-2017	Simos	(D:00)			X	_		90718 12 11/2839 410R
-10	C76/14		10:06			X	1		
11-	C-406'		41.01			\times	/		
-12	6040		10120			λ	1		
~ (8)	Cry Water		14:0	X			7		
-13	C-4 010'		10:49	,		X			
41-	C-4012'		10,50			X	1		
Z1-	M-4514	$\parallel \Psi \parallel$	00.1			X	1		
						-			
						\bigvee		V_{\perp}	
\	Andread Company of colonial and company of colonial and company of colonial and col								
Relinguished by: (Signature)	ζ ,	Received by: (Signature) $564 $	N		,	Date/Tim	Time 230	I hereby author indicated work.	I hereby authorize the performance of the above indicated work.
Relinquished by: (Signature)		Received by Laboratory for analysis: (Signature)	or analys	is:		Date/Time	Ф		
Choosed Instructions:									

DISTRIBUTION: White with report. Yellow to AL, Pink to Courier

LAB SERVICE (213) 745-5312 FAX (213) 745-6372	LOG BOOK NO.	_ FILE NO LAB NO
CLIENT NAME: CARTILLONE	ANALYSE REQUESTED:	
PROJECT NAME CHARAGO GIALINA PROJECT NO.	P.O NO	
ADDRESS:	<u>z</u> Lz,	QC REPORT
PROJECT MANAGER: CAPTO WAYNOLLY PHONE NO: 567 CDP	7-4-10-7/2-7 (1) EX	LEVEL:
SAMPLER NAME: CANO NORMAN LL BOOMERS (M)	in Month with	REMARKS:
TAT {Analytical Turn Around Time} 0 - Same Day: 1 = 24 Hour; 2 = 48 Hour; (Etc.) N = NORMAL		
CONTAINER TYPES: B = Brass, G = Glass, P = Plastic, V = VOA Vial, O = Other:	010	
SAMPLE DATE TIME SAMPLE DESCRIPTION WATER SOIL SLUE	TAT CONTAINER	SAMPLE CONDITION COMMENTS:
60515#-16-23-00/9122 C-2.e.6' X		
-2 1 8:28 Cozes X		
con		
-4 8:36 c-Zell X		
-5 8:40 C-2014 X		
-16 9:00 C-2 Winter X	2	
-6 970 C-306 X		
7 9:24 C-768 X		
17 4:40 C-3 Waster X	2	
N 25:4 K		
Reinguisped by (Signature and Printed Name) Reinguisped by (Signature and Printed Name) Reinguisped by (Signature and Printed Name)	5-25-00 Time 550	SAMPLE DISPOSITION: 1. Samples returned to client? YES NO.
shed By (Signature and Pembet Mann) - Received By (Đạio lane	2. Samples withholde stored over 30 days, diffess
Reinquished By (Signature and Printer: Name) Heceived By (Signature and Printed Name)	Date Lone	Storage train requested
PORCE INCIDENTIONS.		



Environmental Laboratories

09-22-2005

Mr. Chris Wernicke, R.G. Earth Safe 15027 Lashburn Street Whittier, CA 90604

Project:

Carlson Garage

Project Site:

5131 Lincoln Ave., Cypress, CA

Sample Date:

09-16-2005

Lab Job No.:

AH509106

Dear Mr. Wernicke:

Enclosed please find the analytical report for the samples received by STS Environmental Laboratories on 09-16-2005 and analyzed by the following EPA methods or parameters:

EPA 8015M (Gasoline) EPA 8260B (BTEX & Oxygenates)

All analyses have met the QA/QC criteria of this laboratory.

The sample(s) arrived in good conditions (i.e., chilled, intact) and with a chain of custody record attached.

STS Environmental Laboratory is certified by the CA DHS (Certificate Number 1986). Thank you for giving us the opportunity to serve you. Please feel free to call me at (323) 888-0728 if our Laboratory can be of further service to you.

Sincerely,

Roger Wang, Ph.D. Laboratory Director

Enclosures

This cover letter is an integral part of this analytical report.



Environmental Laboratories

09-22-2005

Client:

Earth Safe

Lab Job No.:

AH509106

Project:

Carlson Garage

Date Sampled:

09-16-2005

Project Site: Matrix:

5131 Lincoln Ave., Cypress, CA

Date Received:

09-16-2005

Batch No.:

Water CMI19-GW1

Date Analyzed:

09-19-2005

EPA 8015M (Gasoline) Reporting Unit:µg/L (ppb)

Sample ID	Lab ID	Gasoline(C4-C12)	Reporting Limit
Method Blank		ND	50
MW-1	AH509106-1	ND	50
MW-2	AH509106-2	ND	50
MW-3	AH509106-3	ND	50
MW-4	AH509106-4	ND	50

ND: Not Detected (at the specified limit).

7801 Telegraph Road Suite L. Montebello, CA 90640



Environmental Laboratories

09-22-2005

Client:

Earth Safe

Lab Job No.:

AH509106

Project:

Carlson Garage

5131 Lincoln Ave., Cypress, CA

Date Sampled:

09-16-2005

Project Site: Matrix:

Water

Date Received:

09-16-2005

Batch No.:

water 0919-VOCW1

Date Analyzed:

09-19-2005

EPA 8260B (BTEX & Oxygenates by GC/MS)

Reporting Units: μg/L (ppb)

Lab ID	МВ	AH509106-1	AH509106-2	AH509106-3	AH509106-4	MDL
Sample ID		MW-1	MW-2	MW-3	MW-4	WHIE.
DF	1	1	1	1	1	
Benzene	ND	ND	2.2	ND	ND	 1
Toluene	ND	ND	ND	ND	ND	. 1
Ethylbenzene	ND	ND	4.1	ND	ND	1
Total Xylenes	ND	ND	ND	ND	ND	2
МТВЕ	ND	ND	ND	ND	ND	 2
ETBE	ND	ND	ND	ND	ND	2
DIPE	ND	ND	ND	ND	ND	2
TAME	ND	ND	ND .	ND	ND	2
t-Butyl Alcohol	ND	ND	ND	ND	ND	10

MDL: Method Detection Limit

DF: Dilution Factor (DF \times MDL = Reporting Limit for the sample).

ND: Not Detected (at the specified limit)



Environmental Laboratories

09-22-2005

EPA 8015M(TPH) Batch QA/QC Report

Client:

Earth Safe

Water

Lab Job No.:

AH509106

Project: Matrix: Carlson Garage

Lab Sample ID:

AI509101-1

Batch No:

CMH9-GW1

Date Analyzed:

Phone: (323) 888-0728 Fax: (323) 888-1509

09-19-2005

I. MS/MSD Report Unit: ppb

Analyte	Sample Conc.	Spike Conc.	MS	MSD	MS %Rec.	MSD %Rec.	% RPD	%RPD Accept. Limit	%Rec Accept. Limit
трн-д	ND	1,000	837	961	83.7	96.1	13.8	30	70-130

II. LCS Result Unit: ppb

Analyte	LCS Value	True Value	Rec.%	Accept. Limit
TPH-G	891	1,000	89.1	80-120

ND: Not Detected.



Environmental Laboratories

09-22-2005

EPA 8260B Batch QA/QC Report

Client:

Earth Safe

Project:

Carlson Garage

Matrix:

Water

Batch No:

0919-VOCW1

Lab Job No.:

AH509106

Lab Sample ID:

Al509101-1

Date Analyzed:

09-19-2005

Phone: (323) 888-0728 Fax: (323) 888-1509

I. MS/MSD Report Unit: ppb

Analyte	Sample Conc.	Spike Conc.	MS	MSD	MS %Rec.	MSD %Rec.	% RPD	%RPD Accept. Limit	%Rec Accept. Limit
l,1- Dichloroethene	ND	20	17.8	20.1	89.0	100.5	12.1	30	70-130
Benzene	ND	20	20.6	22.5	103.0	112.5	8.8	30	70-130
Trichloro- ethene	ND	20	19.5	21.2	97.5	106.0	8.4	30	70-130
Toluene	ND	20	19.6	22.2 .	98.0	111.0	12.4	30	70-130
Chlorobenzene	ND	20	21.4	23.2	107.0	116.0	8.1	30	70-130

II. LCS Result Unit: ppb

Analyte	LCS Value	True Value	Rec.%	Accept. Limit
1,1-Dichloroethene	18.2	20	91.0	80-120
Benzene	20.1	20	100.5	80-120
Trichloro-ethene	18.7	20	93.5	80-120
Toluene	19.6	20	98.0	80-120
Chlorobenzene	18.8	20	94.0	80-120

ND: Not Detected.